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9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N . 09/421,808	Applicant(s) TADAYON ET AL.	
	Examiner Melvin H Pollack	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 October 1999* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 October 1999* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2,5,8* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *see attached office action* .

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract is too long. Please limit to 50-150 words.

Drawings

2. New formal drawings are required in this application because of reasons disclosed in the PTO-948. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 4, 5, 7, 12-15, 18, 19, 27-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Crawford (5,771,354).

5. For claim 1, Crawford teaches a computerized active filing system (see abstract), comprising:

a. A memory circuit for storing data (col. 16, lines 16-18);

b. A communications port (col. 16, lines 8-9) that is in communication with a network, said communications port being configured to transmit and receive data over said network (col. 16, lines 30-31); and

c. A processing circuit (col. 16, line 10) that is configured to control the flow of data between said memory circuit and said communications port (col. 14, lines 21-22); said processing circuit also being configured to control said memory circuit so as to operate as a file server (col. 15, lines 16-24 and Figure 5); said processing circuit being further configured to automatically cause a notification message to be sent to said network upon the occurrence of at least one predetermined triggering event pertaining to the operation of said file server (col. 43, lines 5-11), wherein said at least one predetermined triggering event and its associated type and content of automatic notification message are configurable under the control of an auto-notification computer program routine residing on said computerized active file system (col. 43, lines 29-33).

6. As for claim 2, Crawford also teaches that the at least one predetermined triggering event and said automatic notification messages are configurable by a systems administrator (col. 8, lines 55-58). If there is a "configuration file" that is produced by the access triggering events, then there is a way to configure the notification messages, as shown above. Further, it was anticipated that the messages would be configurable by an "administrator" because in a secure environment, only the administrator would have access to the necessary files. An administrator

is someone who sets up and runs the host computer, so the existence of a host computer anticipates the existence of a system administrator that can configure various items.

7. As for claim 4, Crawford shows that the memory circuit comprises random access memory (RAM) (col. 16, line 12) and a hard disk drive (col. 16, lines 16-17).

8. As for claim 5, Crawford teaches that the file server comprises:

a. Said hard disk drive (col. 16, lines 16-17);

b. Said RAM (col. 16, line 12);

c. Control software (col. 17, lines 37-39) that stores and retrieves groupings of data organized as individual files onto and from said hard disk drive, while utilizing said RAM for temporary storage of data that make up portions of said files or entire said files (col. 18, lines 35-58).

9. As for claim 7, Crawford teaches that there is a web server (col. 16, lines 57-59) that is in communication with one of a Local Area Network (col. 15, lines 35-36), a Wide Area Network (col. 16, line 61), and a global set of networks (col. 16, lines 44-46) interconnected with routers (col. 16, lines 52-57).

10. As for claim 12, Crawford teaches that the said triggering event comprises one of said file server granting access to:

a. Read a file (col. 43, lines 44-46);

b. Write a file (col. 43, lines 47-49);

c. Read/write a file (interpreted as any type of access of file) (col. 43, lines 39-43);

d. Download a file (remote reading) (col. 18, lines 55-58);

e. Upload a file (remote writing) (col. 18, lines 55-58).

11. Claim 13 comprises a method with many of the same limitations as claim 1. It is anticipated in the prior art that a method and a system are functionally equivalent. Since claim 1 is rejected, claim 13 is also rejected.

12. Claim 14 comprises a method with many of the same limitations as claim 2. It is anticipated in the prior art that a method and a system are functionally equivalent. Since claim 2 is rejected, claim 14 is also rejected.

13. As for claim 15, Crawford teaches that at least one predetermined triggering event comprises a complex event (col. 43, lines 5-11). The office interprets this claim to mean that the entire triggering event, including the trigger and the notification, comprises more than one action.

14. As for claim 18, Crawford teaches that the said automatic notification message comprises a complex action (col. 43, lines 5-11). The office interprets this claim to mean that the production and transmission of the notification message comprises more than one action.

15. As for claim 19, Crawford teaches that the said complex action comprises launching an application program (col. 37, 37-57).

16. As for claim 27, Crawford teaches that the method further comprises using said access rights function (Crawford, col. 43, lines 5-11) to implement the limitations of claim 12.

17. Claim 28 comprises a method with many of the same limitations as claim 12. It is anticipated in the prior art that a method and a system are functionally equivalent. Since claim 12 is rejected, claim 28 is also rejected.

18. As for claim 29, Crawford teaches that the method further comprises seamlessly encrypting data while uploading a file to said file server (col. 33, line 65 – col. 34, line 3).

19. As for claim 30, Crawford teaches that the said file server operations run on top of another architecture that also runs on said processing circuit (col. 19, lines 31-34).

20. As for claim 31, Crawford teaches that a system for tracking bugs and fixes runs on top of said file server operations, also on said processing circuit (col. 14, line 62 – col. 15, line 6).

21. Claims 36-65 are rejected under 35 U.S.C. 102(e) as being anticipated by Angal et al. (5,999,978).

22. For claim 36, Angal teaches a method (see abstract) for supporting a computerized file system (col. 2, lines 49-51) comprising:

a. Preconfiguring at least one triggering event in a computer program in communication with said computerized file system (col. 8, lines 49-54);

b. Preconfiguring at least one associated action in said computer program, wherein said triggering event and associated action are related to the operation of said computerized file system (col. 9, lines 54-58);

c. Monitoring said computerized file system with said computer program for the occurrence of said at least one preconfigured triggering event (col. 11, lines 4-10); and

d. Initiating said preconfigured associated action with said computer program when said triggering event occurs col. 11, lines 31-38).

23. As for claim 37, Angal teaches that the method further comprises:

a. Preconfiguring an associated group of users in said computer program (col. 9, lines 11-14) wherein said preconfigured associated group of users are associated with said triggering event and said associated action (col. 9, lines 50-51);

b. Initiating said preconfigured associated action with regard to a preconfigured associated group of users (col. 10, lines 15-19).

24. As for claim 38, Angal teaches that the computerized file system is stored in a table (col. 9, lines 6-10).

25. As for claim 39, Angal teaches that the said at least one triggering event optionally includes: Creating a file/object, Uploading a file/object, Downloading/exporting a file/object, Deleting a file/object, Editing a file/object, Moving a file/object, Copying a file/object, Renaming a file/object, Viewing a file/object, Accessing a file/object, Changing access rights for a file/object, or any combination thereof. The above arguments show that the rule trigger is the accessing of a file or object, and all the other triggering events involves the accessing of a file or object. Therefore, Angal's rules would be triggered by every event on this list, making them all anticipated. Further, Angal has shown that there are several triggering events (col. 9, lines 44-45) and each triggering event can exhibit a different response (col. 10, lines 6-9). Angal further teaches that a response can be given for a combination of triggering events (col. 12, lines 32-35).

26. As for claim 40, Angal teaches that the list of associated actions includes:

a. Sending an e-mail message (col. 14, lines 51-54);

b. Enforcing a constraint (col. 11, lines 34-35);

c. Archiving files/objects in said computerized file system (col. 12, lines 3-7);

d. Running a script (All of the above are run by programs that may be implemented in script language. Therefore, this claim is anticipated.)

e. Launching a program (col. 10, lines 51-54);

f. Any combination thereof (col. 11, lines 34-35).

27. Claims 41-43 are an OS-component file system support method of claims 36-38. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. If claims 36-38 are rejected, claims 41-43 are also rejected for the reasons above.

28. As to claim 44, Angal teaches that the at least one triggering event, associated action, and associated group of users are associated with a folder in said operating system's computerized file system (col. 6, lines 26-32).

29. Claims 45 and 46 are an OS-component file system support method of claims 39 and 40. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. If claims 39 and 40 are rejected, claims 45 and 46 are also rejected for the reasons above.

30. Claim 47 is a distributed file system method of claim 36. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. If claim 36 is rejected, claim 47 is also rejected for the reasons above.

31. Claim 48 is a computerized object system method of claim 36. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. If claim 36 is rejected, claim 48 is also rejected for the reasons above.

32. Claim 49 is a file server method with limitations of 36, 37, 39 and 40. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. If claims 36, 37, 39 and 40 are rejected, claim 49 is also rejected for the reasons above.

33. Claims 50-53 are a hardware/software system implementation for claims 36-40. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. If claims 36-40 are rejected, claims 50-53 are also rejected for the reasons above.

34. Claims 54-57 are an OS-Based file system implementation for claims 36-40. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. If claims 36-40 are rejected, claims 54-57 are also rejected for the reasons above.

35. Claims 58-61 are a software system implementation for claims 36-40. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. If claims 36-40 are rejected, claims 58-61 are also rejected for the reasons above.

36. Claims 62 and 63 are an OS-based software system implementation for claims 39 and 40. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. If claims 39 and 40 are rejected, claims 62 and 63 are also rejected for the reasons above.

37. For claim 64, in a computerized active file system having a graphical user interface (fig 4, #212), a method of preconfiguring and performing a trigger (col. 10, lines 54-57), the method comprising:

a. Displaying a set of events (listed 39), a set of actions (listed 40) and a set of users (listed 37) (In order to configure each of these aspects of a trigger – as shown above - using a GUI, the GUI would have to display the choices. The user has to know the option

to change the option. Further, making choices through a GUI menu is well known in the prior art. Therefore, this limitation is anticipated.);

b. Selecting at least one of each (The earlier arguments show that Angal allows for the configuration of the triggers for each of these. The development of a trigger means making the selection of one of each. By definition, one cannot configure the trigger without making the selection, and this limitation is therefore anticipated as well.);

c. Receiving at least one signal indicative of said trigger choices (col. 14, lines 51-54);

d. Configuring said trigger according to said trigger choices (col. 8, lines 49-54 and col. 9, lines 54-58);

e. Monitoring said computerized file system for the occurrence of said at least one triggering event (col. 11, lines 4-10); and

f. Initiating said associated triggering action for said associated triggering group of users (col. 10, lines 15-19).

38. Claim 65 is an OS-based software system implementation for claim 64. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. If claim 64 is rejected, claim 65 is also rejected for the reasons above.

Claim Rejections - 35 USC § 103

39. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

40. Claims 1, 2, 4, 5, 7, 8, 12-15, 18-20, 23 and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford.

41. For claims 1, 2, 4, 5, 7, 12-15, 18, 19, and 27-31, that which is anticipated is obvious.

42. For claim 8, Crawford teaches there is at least one user (col. 12, lines 41-45) that is in communication with said one of a Local Area Network, a Wide Area Network, and a global set of networks interconnected with routers; said at least one user having a computer platform that contains browser software (col. 3, lines 13-15) and graphical user interface software (col. 12, line 59 – col. 13, line 7). Furthermore, GUI software such as Windows and the Mac OS were well known in the art in 1993. Crawford does not mention browser software, as the first software browser, NCSA Mosaic, had just come out in 1993. However, Crawford does teach that the user may interface with the host computer through the Internet, and it is well known in the prior art that the browser was the best way to interact with host machines through the Internet. At the time the invention was made, it would have been obvious to one of ordinary skill in the art that the user computer would have a browser such as MS Explorer or Netscape Navigator.

43. Claim 20 comprises a method with many of the same limitations as claim 8. It is considered obvious in the prior art that a method and a system are functionally equivalent. Claim 20 adds the limitation that the application is launched for the user, which Crawford also teaches (col. 37, 37-57). Further, it is obvious that the application would be launched for the user and would not be launched for anyone else but the user. Since claim 8 is rejected, claim 20 is also rejected.

44. As for claim 23, Crawford implicitly teaches that the method further comprises:

a. Providing at least two users that are in communication with said file server over said network (col. 16, lines 44-51); and

b. Storing more than one single file under an identical virtual filename as presented to said at least two users as a Display Name (col. 18, lines 52-58), while storing said more than one single file under unique actual filenames in a Files Table (col. 21, lines 49-55) contained within said memory circuit along with a link to a location of said more than one single file (col. 21, lines 28-30) in a virtual folder (col. 18, lines 43-46), wherein said location is based upon:

i. A setting in a database (col. 21, lines 53-55) and

ii. A username of the virtual folder where the file is being uploaded to with said file server (col. 21, lines 34-42).

45. Further regarding claim 23, the above items show that a similar process is used for drive mapping. The process can easily be ported to describe the obvious separation method, in which files are stored in "virtual drive" objects, with each user using the drive mapping to find the separated drive. Further, it is an objective of the invention to allow a user to read/write to the virtual drive in much the same way that the user would read/write to a local drive. Therefore, it would be obvious that a method would be implemented so that two people could upload two different files that happened to have the same name. The combination of the "drive translation" and "virtual file object" methods draws the same method that is disclosed above. At the time the invention was made, one of ordinary skill in the art would have recognized the parallels between the two forms and implemented the remote file system method for the purpose of increasing user transparency.

46. Claims 1-7, 9, 10, 12-19, 24, 27-34, and 36-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford as applied to claims 1, 2, 4, 5, 7, 13-15, 18, 19, 29, and 30, above, and further in view of Angal.

47. For claims 1, 2, 4, 5, 7, 12-15, 18, 19, 27-31, and 36-65, that which is anticipated is obvious.

48. As for claim 3, Crawford teaches that the said associated automatic notification messages are transmitted over said network by use of one of:

a. E-mail message technology (Crawford knows about the technology, and expresses a need to send messages over a network.);

b. Predetermined rules-based function (col. 8, line 66 – col. 9, line 24).

49. Crawford does not explicitly disclose that the notification method can be sent by e-mail, although he discloses that the host computer and the user can be connected in a network that allows e-mail to be sent. Angal teaches that, in the secure file system, the messages can be sent via e-mail (col. 14, lines 51-54). Further, e-mail as a system of providing information and messages were becoming ubiquitous even in 1993, as Crawford showed. Angal provides the security developments that Crawford mentions a need for but does not explicitly disclose all of the details for. The addition of e-mail to the system allows a user to access the information in a more secure manner. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the two remote virtual file systems in order to boost the security and convenience of Crawford.

50. As for claim 6, Crawford does not expressly teach the trigger database, but does express the need to store the trigger information in a file (col. 8, lines 55-58). Angal teaches that there is a database that contains information relating to said at least one predetermined triggering event (col. 4, lines 28-31) and its associated type of automatic notification message (col. 9, lines 54-58). At the time the invention was made, one of ordinary skill in the art would have used the database format of Angal to save the information in Crawford's file in order to better organize the data for editing.

51. As for claim 9, it has the same limitations of claim 3, plus the limitation that the messages are sent to the user (Crawford, col. 8, line 66 – col. 9, line 24). At the time the invention was made, one of ordinary skill in the art would have combined the teachings for the reasons listed above.

52. As for claim 10, the combination of Crawford and Angal further shows that the system in claim 1 further comprises:

a. An authentication function (Crawford, col. 10, lines 15-18);

b. An access rights function (Crawford, col. 43, lines 5-11);

c. A user management function (Angal, col. 9, lines 15-27);

d. A group management function (Angal, col. 9, lines 11-15);

e. A modules management function (Crawford, col. 18, lines 49-52); and

f. An objects management function (Crawford, col. 18, lines 43-46).

53. Crawford teaches most of the functions, as shown above. Crawford also teaches that we need to manage users (in order to allow the authentication function and to bill them for usage) and it teaches that we need some way to determine who accesses what information. Crawford

does not explicitly disclose granting rights to people in a particular group. Angal teaches the granting of these rights, and fleshes out the implementation of user management in fuller detail. At the time the invention was made, one of ordinary skill in the art would have added the group management implementation methods to allow a secure method of file sharing within a group.

54. Claim 16 comprises a method with many of the same limitations as claim 6. It is considered obvious in the prior art that a method and a system are functionally equivalent. Since claim 6 is rejected, claim 16 is also rejected.

55. Claim 17 comprises a method with many of the same limitations as claim 3. It is considered obvious in the prior art that a method and a system are functionally equivalent. Since claim 3 is rejected, claim 17 is also rejected.

56. Claim 24 comprises a method with many of the same limitations as claim 10. It is considered obvious in the prior art that a method and a system are functionally equivalent. Since claim 10 is rejected, claim 24 is also rejected.

57. Claim 32 comprises a virtual file system (Crawford, col. 18, lines 2-5) with many of the same limitations as claims 1, 2 and 9. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. Since claims 1, 2 and 9 are rejected, claim 32 is also rejected.

58. Claim 33 comprises a virtual file system with many of the same limitations as claim 12. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. Since claim 12 is rejected, claim 33 is also rejected.

59. Claim 34 comprises a virtual file system with many of the same limitations as claim 1. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. Since claim 1 is rejected, claim 34 is also rejected.

60. Claims 13, 21, 22, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford and Angal as applied to claims 1-7, 9, 10, 12-19, 24, 27-34, and 36-65 above, and further in view of Payne et al. (6,021,433).

61. For claim 13, that which is anticipated is obvious.

62. Claim 21 comprises a method with many of the same limitations as claims 7 and 8. It is considered obvious in the prior art that a method and a system are functionally equivalent. Since claims 7 and 8 are rejected, those limitations in claim 21 are also rejected.

63. Claim 21 is further drawn to a link contained within said automatic notification message opens said at least one user's browser software and takes the user to a folder or object that was just triggered. Crawford and Angal both disclose the automatic notification messages, but neither details the content of the notification message. Payne is another remote file management system with many of the same limitations that Crawford and Angal disclose. Payne also teaches that a URL would be embedded in the message and that the link would, upon user request, bring the user to the information at issue (col. 3, lines 32-36). At the time the invention was made, one of ordinary skill in the art would have used the message format in Payne to implement the messaging of Crawford and/or Angal in order to provide the user with more information in regards to the notification at hand.

64. As for claim 22, the combination of Crawford and Angal teaches that a distribution of said automatic messages is determined by:

a. A type of said at least one predetermined triggering event (Crawford, col. 43, lines 5-11); and

b. A predetermined set of said at least one user, as per a group definition (Angal, col. 9, lines 11-15).

65. Further regarding claim 22, the combination of the Crawford and Angal teachings for this particular combination is discussed in the discussion on claim 10. At the time the invention was made, one of ordinary skill in the art would have combined the two teachings for the reasons listed above.

66. Claim 35 comprises a virtual file system with many of the same limitations as claim 3. The prior art shows that the limitations are functionally similar, and that the new environment does not affect the functionality. Since claim 3 is rejected, claim 35 is also rejected.

67. Further regarding claim 35, Payne teaches the added limitations that notification e-mail is sent to virtually immediately notify said predetermined users who are currently logged-on of appropriate site activity at said file server (col. 2, lines 58-60), wherein others of said predetermined users are notified upon their next login session (col. 6, lines 61-66). This fulfills the interest of both Crawford and Angal to alert the user to certain messages or events regardless of whether the user is online or offline. Further, Payne's system can be used to flesh out the message distribution method of the notification systems within the remote file storage inventions. At the time the invention was made, one of ordinary skill in the art would have

implemented the Payne system of distribution in order to ensure the timely receipt of an event notification.

68. Claims 13 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford and Angal as applied to claims 1-7, 9, 10, 12-19, 24, 27-34, and 36-65 above, and further in view of Thurlow et al. (5,917,489).

69. For claim 13, that which is anticipated is obvious.

70. As for claim 26, Crawford teaches that the method further comprises controlling a plurality of objects by use of said modules management function and said objects management function, as shown above. Neither Crawford nor Angal teaches that the said plurality of objects each comprises one of: a file, calender, contact, report, and E-mail message. Thurlow's trigger processing, which can be implemented into Crawford and/or Angal as the discussed but undisclosed GUI interface, includes a linkage into MS Outlook that would provide the combination with these limitations (col. 3, lines 17-32). The addition of Thurlow to the Crawford/Angal system would flesh out the user/host interface methods and further allow for better Internet communication. At the time the invention was made, one of ordinary skill in the art would have added the rules development GUI to the rule/trigger system in order to more easily develop a set of rules and triggers.

71. Claims 1, 11, 13 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford and Angal as applied to claims 1-7, 9, 10, 12-19, 24, 27-34, and 36-65 above, and further in view of Serbinis et al. (6,314,425).

72. For claims 1 and 13, that which is anticipated is obvious.

73. As for claim 11, Crawford and Angal fail to disclose that the system further comprises a function that imports users and groups from other computer systems, although they do provide that the user and group information is stored in files that can be transferred to other files. Serbinis teaches that, upon registering for a new service, much of the information is imported from the old service, even if the services reside on separate computers (col. 18, lines 10-17). The Serbinis database technique, used in its own remote file sharing system and event notification method, improves on the Crawford and Angal databases by lessening the required system resources and by simplifying the steps a user must take to join a new service. At the time the invention was made, one of ordinary skill in the art would have used the Serbinis database to improve the Crawford/Angal file system by streamlining the user data storage process.

74. Claim 25 comprises a method with many of the same limitations as claim 11. It is considered obvious in the prior art that a method and a system are functionally equivalent. Since claim 11 is rejected, those limitations in claim 25 are also rejected.

Conclusion

75. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schutzman et al. (5,627,764) teaches another rule based messaging system. Crawford (6,014,651) updates the previous Crawford file by adding security and encryption limitations. Hobbs (5,987,454) and Payne et al. (6, 092,090) both teach the uses and limitations of large data warehouses to store remote files. Meyer et al. (6,321,254) teaches another way to seperate remote storage into virtual drives. Smith teaches another form of notification triggering

(5,790,790). Konrad (5,544,320) teaches general implementations of client-server functionalities. Potts, Jr. (6,035,325) teaches an alternative form of the notification message. Helland et al. (6,014,666) teaches another method of grouping users to provide security. Lambert et al. (6,038,601) and Papierniak et al. (6,151,601) teach the use of notification messages to send statistical information or predictive information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin H Pollack whose telephone number is (703) 305-4641. The examiner can normally be reached on 8-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H Rinehart can be reached on (703) 308-4815. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

MHP
June 21, 2002

ROBERT B. HARRELL
PRIMARY EXAMINER

Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson. **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.